

# Development of the method of dynamic tests support of air transmission lines

Sabitov L., Gatiyatov I., Kashapov N., Gilmanshin I., Kiyamov I.

*Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia*

---

## Abstract

© Published under licence by IOP Publishing Ltd. Known methods of testing supports create longitudinal and transverse static load applied to the support. In real conditions the majority of the damage of the supports is connected with the influence on them of dynamic loads, which can exceed the static. The proposed method allows to conduct experimental studies of cascade processes of destruction of anchor site due to a wire breakage, when the potential energy of the tension wires is converted into a dynamic influence on the design of supports.

<http://dx.doi.org/10.1088/1757-899X/412/1/012063>

---

## References

- [1] The patent of the Russian Federation No 2554285 MUK G01M5 / 00, publ. 05/10/2015. - ref-separator -
- [2] Birbraer A N 2009 Extreme effects on structures (SPb.: Publishing house of Polytechnic University) 594
- [3] The patent of the Russian Federation No 2574419 MITK G01M7 / 02, publ. 10.02.2016. - ref-separator -
- [4] Kuznetsova V V 1999 Metal structures 3 (M.: ASV) 528
- [5] Kryukov K P and Novgorodtsev B P 1979 Constructions and mechanical calculation of power lines (L.: Energia) 312
- [6] Acherkan N 1968 Machine parts 2 (M.: Mechanical Engineering) 408